Customer No.: 31561 Application No.: 10/710,765

Docket No.: 13505-US-PA

AMENDMENT

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Please amend the application as indicated hereafter.

JAN 0 7 2005

In the Claims:

1. (original) An electrically erasable and programmable read only memory (EEPROM) cell, comprising:

a stacking layer disposed over a substrate, wherein the stacking layer comprises a tunneling dielectric layer, a charge trapping layer and a block dielectric layer sequentially;

- a gate conductive layer, disposed over the stacking layer;
- a first source/ drain region and a second source/ drain region, respectively disposed on two sides of the gate conductive layer in the substrate;
- a first pocket implant doping region, disposed below the stacking layer in the substrate being adjacent to the first source/ drain region; and
- a second pocket implant doping region, disposed below the stacking layer in the substrate being adjacent to the second source/ drain region, and a doping concentration of the first pocket implant doping region is different from a doping concentration of the second pocket implant doping region.
- 2. (original) The EEPROM cell as recited in claim 1, wherein a dopant type of the first pocket implant doping region and the second pocket implant doping region is opposite to a dopant type of the first source/ drain region and a second source/ drain region.

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- 3. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the first pocket implant doping region is P-type.
- 4. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the second pocket implant doping region is P-type.
- 5. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the first source/ drain region is N-type.
- 6. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the second source/ drain region is N-type.
- 7. (original) The EEPROM cell as recited in claim 1, wherein a material of the tunneling dielectric layer comprises silicon oxide.
- 8. (original) The EEPROM cell as recited in claim 1, wherein a material of the charge trapping layer comprises silicon nitride.
- 9. (original) The EEPROM cell as recited in claim 1, wherein a material of the blocking dielectric layer comprises silicon oxide.

10.-17. (canceled)